

## Product datasheet for **SC126870**

### Calpain 3 (CAPN3) (NM\_173089) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calpain 3 (CAPN3) (NM_173089) Human Untagged Clone
Tag:	Tag Free
Symbol:	Calpain 3
Synonyms:	CANP3; CANPL3; LGMD2; LGMD2A; LGMDD4; LGMDR1; nCL-1; p94
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_173089, the custom clone sequence may differ by one or more nucleotides

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ATGGAGATCTGTGCAGATGAGCTCAAGAAGGTCCTTAACACAGTCGTGAACAAACACAAGGACCTGAAGA  
CACACGGGTTCACTGGAGTCCTGCCGTAGCATGATTGCGCTCATGGATACAGATGGCTCTGGAAAGCT  
CAACCTGCAGGAGTTCACCCACCTCTGGAACAAGATTAAGGCCTGGCAGAAAATTTCAAACACTATGAC  
ACAGACCAGTCCGGCACCATCAACAGCTACGAGATGCGAAATGCAGTCAACGACGCAGGATTCCACCTCA  
ACAACCAGCTCTATGACATCATTACCATGCGGTACGCAGACAAACACATGAACATCGACTTTGACAGTTT  
CATCTGCTGCTTCGTTAGGCTGGAGGGCATGTTTCAGAGCTTTTCATGCATTTGACAAGGATGGAGATGGT  
ATCATCAAGCTCAACGTTCTGGAGTGGCTGCAGCTCACCATGTATGCCTGA
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_173089 unedited NAGATCACATTTGTAACGACTCATATAGGCGGCACGCGAATTCGCACGAGGCACAGGCG ATTGGTTTTAGTGGTAAGTGTGTGGGATCTGTTCTGGTCATCTGGATGCTGGTCATCGG TGTGCAGTATTGATCAGGACCTGCAACCCAAAAGCTTATGGGAGCTGGCAGTCACAAA AAGAAAAAACAAGCCACAGCCTGGCAGCTCTGATCAGGAAAGTGAGGAACAGCAACAA TTCCGGAACATTTTCAAGCAGATAGCAGGAGATGACATGGAGATCTGTGCAGATGAGCTC AAGAAGTCCCTTAACACAGTCGTGAACAACACAAGGACCTGAAGACACACGGGTTCA CTGGAGTCTGCCGTAGCATGATTGCGCTCATGGATACAGATGGCTCTGGAAAGCTCAAC CTGCAGGAGTTCCACCACCTCTGGAACAAGATTAAGCCTGGCAGAAAATTTTCAAACAC TATGACACAGACCAGTCCGGCACCATCAACAGCTACGAGATGCGAAATGCAGTCAACGAC GCAGGATCCACCTCAACAACCAGCTCTATGACATCATTACCATGCGGTACGCAGACAAA CACATGAACATCGACTTTGACAGTTTCATCTGCTGCTTCGTTAGGCTGGAGGGCATGTT AGAGCTTTTCATGCATTTGACAAGGATGGAGATGGTATCATCAAGCTCAACGTTCTGGAG TGGCTGCAGCTCACCATGTATGCCTGAACCANGCTGGCCTCATCAAAGCCATGCAAGGA TCACTCAGATTTTCACTTCCACCCTCTATTTTCAAAGCATTACCTCAAAGACCCAGCAGC TACACCCCTACAGGCTTCCAGGCACCTCATCAGTCATGTTGCTCTNCATTTTACCCCTT
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_173089
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_173089.1</a> , <a href="#">NP_775112.1</a>
<b>RefSeq Size:</b>	1291 bp
<b>RefSeq ORF:</b>	471 bp
<b>Locus ID:</b>	825
<b>UniProt ID:</b>	<a href="#">P20807</a>
<b>Cytogenetics:</b>	15q15.1
<b>Protein Families:</b>	Druggable Genome, Protease

**Gene Summary:**

Calpain, a heterodimer consisting of a large and a small subunit, is a major intracellular protease, although its function has not been well established. This gene encodes a muscle-specific member of the calpain large subunit family that specifically binds to titin. Mutations in this gene are associated with limb-girdle muscular dystrophies type 2A. Alternate promoters and alternative splicing result in multiple transcript variants encoding different isoforms and some variants are ubiquitously expressed. [provided by RefSeq, Jul 2008]  
Transcript Variant: This variant (5) differs in the 5' UTR and uses a downstream start codon, compared to variant 1. It encodes isoform e, which has a shorter N-terminus compared to isoform a.